



L-BAR
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FILE COPY

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

4601 N. Monroe, Suite 202 • Spokane, Washington 99205-1295 • (509) 456-2926

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

In the Matter of Remedial Action)
at the:)
L-BAR SITE)
_____)
)

AGREED ORDER

No. DE 94TC-E104

TO: Northwest Alloys, Inc.
L-Bar Products, Inc.
Reserve Industries Corporation

Collectively referred to herein as
the Potentially Liable Persons (the PLPs)

I.
Jurisdiction

This Agreed Order ("Order") is issued pursuant to the
authority of RCW 70.105D.050(1).

II.

Findings of Fact

Ecology makes the following Findings of Fact, without
admission of such facts by the PLPs.

1. The L-Bar Site is located approximately two miles
south of Chewelah, Washington on the west side of U.S.
Highway 395 in the eastern half of the SE $\frac{1}{4}$ of Section 23,
Township 32 North, Range 40 E.W.M. in Stevens County. The
location of the site is shown in Exhibit A of this Order.

2. A magnesite pile about 30 feet deep and covering
about five (5) acres is found west of the site. Two
drainage ditches, Ditch A and Ditch B, collect storm water
run-off from the site and empty into the Colville River.
(See Exhibit B).

3. Most of the site is owned by L-Bar Products, Inc., (L-Bar), a wholly owned subsidiary of Reserve Industries Corporation (Reserve). L-Bar operated a magnesium recovery plant at the site from approximately March 1986 to December 1991. Prior to L-Bar, Phoenix Resource Recovery, Inc., owned and operated the facility from 1975 to 1986.

4. The major operation at the plant was to recover magnesium trapped in granular form. The sludge bars, a by-product of magnesium production facilities, were mostly supplied by Northwest Alloys, Inc. (NWA) from the magnesium metal plant in Addy, Washington.

5. Recovery was made by crushing and grinding the sludge bars to a powder and screening out the magnesium granules. The remaining ground material was called sludge bar residue (SBR), some of which was processed and sold as fertilizer or de-icer.

6. Sludge bars and SBRs consist mainly of spent flux of metal chlorides and some nitride compounds. They are very reactive with water, causing ammonia to be released. The reaction of sludge bars and SBRs with water also generates heat. As a result, several fires accompanied by releases of smoke, dust, and ammonia to the air occurred at this facility during its operation.

7. Sludge bars and SBRs in this facility are classified as state dangerous wastes, based on toxicity to fish.

8. Past operating practices and inadequate storage of the sludge bars and SBRs have resulted in known contamination of ground water and surface water. Past data collected for ground water show a maximum value of about 60,000 mg/L chloride and 120,000 mg/L total dissolved solids concentrations in the local shallow water table aquifer.

These concentrations greatly exceed EPA's secondary maximum contaminant levels (MCLs) of 250 mg/L for chloride and 500 mg/L for total dissolved solids. In 1988, chloride concentration measurements along Ditch A ranged from 6,690 to 18,000 mg/L.

9. The Department of Ecology (Ecology) has issued several Enforcement Orders and Penalties to L-Bar during its operation from 1986 to 1991 for violations of air, water quality and dangerous waste regulations. In August 1988, Ecology filed a civil suit against L-Bar, Reserve (parent

company of L-Bar), NWA, and Aluminum Company of America (Alcoa, the parent company of NWA) in the Superior Court of Stevens County for violation of environmental laws.

10. Due to operating losses, L-Bar closed down operations in December 1991 and is currently undergoing reorganization under Chapter 11 in the United States Bankruptcy Court in the Eastern District Court in Washington. Approximately 90,000 tons of materials, including sludge bars and SBRs, are still stored at the site in buildings, under a covered pile, and on top of the magnesite pile.

11. At the time of closure, L-Bar was in the process of upgrading and rehabilitating the site as part of a proposed settlement of the civil suit filed by Ecology. Part of the rehabilitation was a water management system which was to collect surface runoff and ground water for treatment before discharging to the Colville River. This system was never completed, but as a result of the work, two collection ponds are in place and waters have accumulated in these ponds (see Exhibit B). Water in these two ponds is primarily surface runoff and direct precipitation, which overflows to Ditch A when full.

12. In the winter of 1992-93, the snow load caused some of the buildings where sludge bars, SBRs, and other hazardous substances are stored, to collapse. Damages to the storm water collection system and to the cover of a dangerous waste pile also occurred. These damages posed significant human health and environmental risks.

13. In October 1993, under the authority of RCW 70.105D.030, Ecology conducted an emergency action at the L-Bar site to reduce those risks. This emergency action included: retrieving, sampling, overpacking, labeling, and storing in a locked and covered structurally sound building those acid drums that were under collapsed buildings or buildings about to collapse; patching a large hole in the dangerous waste pile cover; repairing broken pavings and curbs of the storm water collection system; posting hazard signs; and limiting site access by installing gates across transportation routes.

14. Beginning in January 1994, NWA voluntarily initiated independent interim remedial action. The objective of the work was to perform further environmental and engineering stabilization activities at the site. This included: relocation of hazardous substances from unsecured

areas to protected on-site storage areas; dismantling of structurally unsound buildings; cleaning and repair of roofing and windows in buildings which would remain as interim storage facilities; increasing the capacities of holding ponds; and, sweeping of paved areas to improve the quality of storm water leaving the facility.

15. On January 13, 1994, Ecology issued final determinations of Potentially Liable Person (PLP) status to:

- a. L-Bar Products, Inc., as owner/operator.
- b. Reserve Industries Corporation, as owner/operator;
- c. Northwest Alloys, Inc., as generator.

16. Ecology has received information concerning additional parties which may be PLPs at the Site. The agency will continue to consider additional information concerning other PLPs as it becomes available and may name more PLPs at a later date.

17. Analytical samples from three locations along Ditch A taken in October, 1993 by NWA contained chloride at concentrations ranging from 6800 to 7200 mg/L and ammonia as nitrogen (NH₃-N) concentrations ranging from 160 to 190 mg/L. In December 1993, an analytical sample taken from Ditch A near the river showed a NH₃-N concentration of 470 mg/L. These concentrations exceed state and federal surface water standards.

18. Ditch A, which collects the storm water runoff from the facility and pond overflows, also serves as a natural discharge of contaminated ground water. Water in Ditch A is partially contained from entering the river by an earthen dam blocked by hay bales and erosion control fabric and drained by a culvert. The water level in Ditch A is approaching an elevation that will result in overflow or cause erosion of the dam, thus posing a significant risk of a catastrophic release of contaminated water into the Colville River which may be toxic to fish and other aquatic life.

19. Ecology issued Emergency Enforcement Order No. DE 94TC-E102 effective March 17, 1994 to the PLPs. This Order requires the PLPs to apply for a National Pollutant Discharge Elimination System (NPDES) permit for a surface water discharge to the Colville River. In addition, the Order requires the PLPs to immediately conduct controlled and monitored releases of the water from the ditch into the

river under conditions specified by Ecology in order to prevent a potential catastrophic release of the water.

20. Studies germane to the site investigations include, but are not limited to:

a. In-Situ, Inc., 1988. Hydrologic Report L-Bar Products, Inc. Facility Near Chewelah, Washington.

b. Dames and Moore, 1991. Environmental Assessment of Sites Operated by L-Bar Products, Inc., Chewelah, Washington.

c. Wright Engineers, Ltd., 1988. Magnesium Recovery and By-Product Production Plant Rehabilitation.

d. Wright Engineers, Ltd., 1989. Water Management Chewelah Site.

III.

Ecology Determinations

1. L-Bar and Reserve are "owners or operators" as defined in RCW 70.105D.020(6) of a "facility" as defined in RCW 70.105D.020(3).

2. NWA was a "generator" of hazardous substances found at the facility under RCW 70.105D.040(1).

3. The facility is known as the L-Bar Site and is located on the west side of U. S. Highway 395 approximately two miles south of Chewelah, Washington.

4. The substances found at the facility as described above are "hazardous substances" as defined at RCW 70.105D.020(5).

5. Based on the presence of these hazardous substances at the facility and all factors known to Ecology, there is a release or threatened release of hazardous substances from the facility as defined at RCW 70.105D.020(10).

6. By letters dated January 13, 1994, Ecology notified each of the PLPs of its status as a "potentially liable person" under RCW 70.105D.040 after notice and opportunity for comment.

7. Pursuant to RCW 70.105D.030(1) and 70.105D.050, Ecology may require potentially liable persons to investigate or conduct other remedial actions with respect to the release or threatened release of hazardous substances whenever it believes such action to be in the public interest.

8. Based on the foregoing facts, Ecology believes the remedial action required by this Order is in the public interest.

IV.

Work to be Performed

Based on the foregoing Facts and Determinations, it is hereby ordered that the PLPs take the following remedial actions and that these actions be conducted in accordance with Chapter 173-340 WAC unless otherwise specifically provided for herein.

1. The work to be performed includes an Interim Action and a phased Remedial Investigation/Feasibility Study (RI/FS). Attached hereto are the Scopes of Work for an Interim Action as Exhibit C, and for a phased RI/FS as Exhibit D.

2. The PLPs shall submit Work Plans to implement the attached Scopes of Work and will proceed with implementation of scopes in accordance with the schedules attached to Exhibits C and D and/or as specified in the approved work plans.

3. These Work Plans shall consist of a detailed description of the work to be performed, personnel requirements and schedules for implementation including the following elements thereof:

- a. Health and Safety Plan
- b. Sampling and Analysis Plan
- c. Public Participation Plan
- d. Compliance and Monitoring Plan
(for Interim Action only)
- e. Operations and Maintenance Plan
(for Interim Action only)

These work plans and each element thereof shall be designed, implemented, and completed in accordance with the Model Toxics Control Act (Chapter 70.105D RCW) and its

implementing regulations (Chapter 173-340 WAC) as amended, and all applicable federal, state and local laws and regulations.

4. After receipt of the work plans Ecology shall notify the PLPs, in writing, of Ecology's approval or disapproval of the work plan. In the event of disapproval, Ecology shall specify in writing both the deficiencies and any Ecology-recommended modifications regarding the Work Plans.

5. Following receipt of Ecology's notification of the Work Plan disapproval or recommended modifications, the PLPs shall amend and submit to Ecology a revised Work Plan incorporating the modifications required by Ecology as provided in the schedules attached to Exhibits C and D. Prior to submission of the revised Work Plan, the PLPs may submit comments to Ecology for review regarding the Work Plan disapproval or recommended modifications.

6. As provided in the schedules attached to Exhibits C and D, the PLPs shall commence work and thereafter complete all tasks by the dates indicated in the approved schedule. The Work Plans and Schedules, when approved by Ecology, shall be immediately attached to and incorporated into this Order and shall thereafter be an integral and enforceable part of this Order.

7. Progress reports shall be completed on a bimonthly (i.e., every other month) basis and shall be submitted by the tenth day of the month in which they are due after the effective date of this Order. The reports shall address progress made during the period, work in progress, problem areas, key activities, deliverables submitted, field work and data generated, subcontracting, analytical services performed, and key staff changes.

8. In accordance with WAC 173-340-840(5), sampling data shall be submitted according to Exhibit E: GROUND WATER SAMPLING DATA SUBMITTAL REQUIREMENTS. These submittals shall be provided to Ecology in accordance with the schedules specified in the approved work plans.

V.

Terms and Conditions of Order

1. Definitions

Unless otherwise specified, the definitions set forth in Chapter 70.105D RCW and Chapter 173-340 WAC shall control the meanings of the terms used in this Order.

2. Public Notices

WAC 173-340-600(10)(c) requires a 30-day public comment period before this Agreed Order becomes effective. Ecology shall be responsible for providing such public notice and reserves the right to modify or withdraw any provisions of this Order should public comment disclose facts or considerations which indicate to Ecology that the Order is inadequate or improper in any respect. Should such revisions be made, PLPs reserve the right to agree to the revisions prior to the order becoming effective. If the parties cannot reach agreement on any revision, Ecology reserves all rights to issue a unilateral enforcement order.

3. Remedial Action Costs

The PLPs shall pay to Ecology costs incurred by Ecology pursuant to this Order. These costs shall include work performed by Ecology or its contractors for investigations, remedial actions, and Order preparation, oversight and administration. Ecology costs shall include costs of direct activities and support costs of direct activities as defined in WAC 173-340-550(2). The PLPs shall pay the required amount within 90 days of receiving from Ecology an itemized statement of costs that includes a summary of costs incurred, an identification of involved staff, and the amount of time spent by involved staff members on the project. A general description of work performed will be provided upon request. For work commencing on July 1, 1994, itemized statements shall be prepared quarterly. Failure to pay Ecology's costs within 90 days of receipt of the itemized statement of costs will result in interest charges.

For work performed from July 1, 1993 to June 30, 1994, the PLPs shall pay to Ecology the amount of \$80,576.98, plus applicable accrued interests, within 30 days of signing the

reorganization plan. This work performed includes: order preparation, oversight and administration in the amount of \$52,432.26 for July 1, 1993 to June 30, 1994 billed to PLPs in unpaid invoices #1T000145-01-AA, -AB, -AC and #1T000145-02-AA, -AB, -AC under Emergency Order No. DE 94TC-E102, and \$4,400.50 for July 1, 1994 to July 31, 1994 which still has to be billed for the next quarter; and, the costs of Ecology contractor-conducted emergency remedial measures at the L-Bar facility in the amount of \$23,744.22.

4. Designated Project Coordinators

The project coordinator for Ecology is:

Teresita Bala
Toxics Cleanup Program
4601 N. Monroe, Suite 100
Spokane, WA 99205-1295
Telephone: (509) 456-6337

The project coordinator for the PLPs is:

Ozzie Wilkinson
Northwest Alloys, Inc.
P. O. Box 115
Addy, WA 99101-0115
Telephone: (509) 935-3369

The project coordinator(s) shall be responsible for overseeing the implementation of this Order. To the maximum extent possible, communication between Ecology and the PLPs, and all documents, including reports, approvals, and other correspondence concerning the activities performed pursuant to the terms and conditions of this Order, shall be directed through the project coordinator(s). Should Ecology or the PLPs change project coordinator(s), each shall make best efforts to provide written notification to the other at least ten (10) calendar days prior to the change.

5. Performance

All work performed pursuant to this Order shall be under the direction and supervision, as necessary, of a professional engineer or hydrogeologist, or similar expert with appropriate training, experience and expertise in hazardous waste site investigation and cleanup. The PLPs shall notify Ecology of the identity of such engineer(s) or hydrogeologist(s) and of any contractors and subcontractors

to be used in carrying out the terms of this Order in advance of their involvement at the Site. The PLPs shall provide a copy of the Order to all agents, contractors, and subcontractors retained to perform work required by this Order and shall ensure that all work undertaken by such agents, contractors and subcontractors will be in compliance with this Order.

Except where necessary to abate an emergency situation, the PLPs shall not perform any remedial actions at the L-Bar site outside that required by this Order unless Ecology concurs, in writing, with such additional remedial actions. This provision shall not affect the PLP's ability to process site materials either on or off site and transport such materials for recycling/reuse (e.g. processing SBR as a fertilizer) during the course of the RI/FS in accordance with State and Federal regulations and all required permits, provided that the PLPs submit to Ecology a detailed report of any such actions at least ten (10) working days before taking such actions. Ecology shall review and approve or deny such request within five (5) working days of receipt of the report.

6. Access

Ecology or any Ecology authorized representative shall have the authority to enter and freely move about the Site at all reasonable times for the purposes of, inter alia: inspecting records, operation logs, contracts, and other documents related to the work being performed pursuant to this Order; reviewing the progress in carrying out the terms of this Order; conducting such tests or collecting samples as Ecology or the Ecology project coordinator may deem necessary; using a camera, sound recording, or other documentary type equipment to record work done pursuant to this Order; and verifying the data submitted to Ecology by the PLPs. By signing this Agreed Order, the PLPs agree that this Order constitutes reasonable notice of access, and agree to allow access to the Site at all reasonable times for purposes of overseeing work performed under this Order.

The PLPs shall notify Ecology in writing if they determine that access to any property not owned or operated by the PLPs is necessary to perform any remedial action required by this Order. The PLPs also shall make best efforts to submit to Ecology prior to performing such remedial action fully-executed access agreements between the PLPs and the owners of such property. If, after all

reasonable efforts, PLPs are unable to achieve access, Ecology will assist in gaining access.

Ecology will make best efforts to provide a minimum of five (5) working days' advance notice to PLPs of any sampling. Ecology shall allow split or replicate samples to be taken by the PLPs during an inspection unless doing so interferes with Ecology's sampling. The PLPs shall similarly allow split or replicate samples to be taken by Ecology with Ecology's sample containers and shall make their best efforts to provide at least ten (10) working days' notice before any sampling activity. Should Ecology desire to split samples during the PLPs' sampling activity, Ecology will make its very best effort to provide at least five (5) working days' advance notice.

7. Public Participation

The PLPs shall prepare and/or update a public participation plan for the site. Ecology shall maintain the responsibility for public participation at the site. The PLPs shall help coordinate and implement public participation for the site.

8. Retention of Records

The PLPs shall preserve in a readily retrievable fashion, during the pendency of this Order and for ten (10) years from the date of completion of the work performed pursuant to this Order, all records, reports, documents, and underlying data in their possession which are relevant to this Order. Should any portion of the work performed hereunder be undertaken through agents, contractors or subcontractors for the PLPs, then the PLPs agree to include in their contract with such contractors or agents a record retention requirement meeting the terms of this paragraph.

9. Dispute Resolution

The PLPs may request Ecology to resolve disputes which may arise during the implementation of this Order. In the event the PLPs dispute an approval, disapproval, proposed modification or other decision or action by Ecology's project coordinator, the PLPs shall utilize the following dispute resolution:

Upon receipt in writing of the Ecology project coordinator's decision, PLPs have seven (7) working days within which to notify Ecology's

project coordinator in writing of their objection to the decision.

Ecology's project coordinator and the PLP's project coordinator and/or representative of the PLPs shall then confer in an effort to resolve the dispute. If Ecology's project coordinator and the PLP's project coordinator and/or representative of the PLPs cannot resolve the dispute within seven (7) working days, Ecology's project coordinator shall issue a written decision within five (5) working days from such date.

The PLPs may then request that Ecology management review the decision made by the Ecology project coordinator. Such request shall be in writing and directed to the signatory or his/her successor(s) to this Order. Ecology resolution of the dispute shall be binding and final. The project coordinators will make all reasonable efforts to comply with the project schedule in the event of a dispute. However, if requested and necessary, Ecology may consider adjustments to the project schedule.

Ecology and the PLPs agree to utilize the dispute resolution process in good faith and agree to expedite, to the extent possible, the dispute resolution process whenever it is used.

The PLPs are not relieved of any requirement of this Order during the pendency of the dispute and remain responsible for timely compliance with the terms of the Order unless otherwise provided by Ecology in writing.

10. Reservation of Rights/No Settlement

This Agreed Order is not a settlement under Chapter 70.105D RCW. Ecology's signature on this Order in no way constitutes a covenant not to sue or a compromise of any Ecology rights or authority. Ecology will not, however, bring an action against the PLPs to recover remedial action costs paid to and received by Ecology under this Agreed Order. In addition, Ecology will not take additional enforcement actions against the PLPs to require those remedial actions required by this Agreed Order, provided the PLPs comply with this Agreed Order.

Ecology reserves the right, however, to require additional remedial actions at the Site should it deem such actions necessary.

Ecology also reserves all rights regarding the injury to, destruction of, or loss of natural resources resulting from the releases or threatened releases of hazardous substances from the L-Bar Site.

In the event Ecology determines that conditions at the Site are creating or have the potential to create a danger to the health or welfare of the people on the Site or in the surrounding area or to the environment, Ecology may order the PLPs to take certain actions or to stop further implementation of this Order for such period of time as needed to abate the danger.

11. Transference of Property

No voluntary or involuntary conveyance or relinquishment of title, easement, leasehold, or other interest in any portion of the Site shall be consummated by the PLPs without provision for continued implementation of all requirements of this Order and implementation of any remedial actions found to be necessary as a result of this Order.

Prior to transfer of any legal or equitable interest the PLPs may have in the site or any portions thereof, the PLPs shall serve a copy of this Order upon any prospective purchaser, lessee, transferee, assignee, or other successor in such interest. At least thirty (30) days prior to finalization of any transfer, the PLPs shall notify Ecology of the contemplated transfer.

12. Compliance with Other Applicable Laws

All actions carried out by the PLPs pursuant to this Order shall be done in accordance with all applicable federal, state, and local requirements.

VI.

Satisfaction of this Order

The provisions of this Order shall be deemed satisfied upon the PLPs' receipt of written notification from Ecology that the PLPs have completed the remedial activity required

by this Order, as amended by any modifications, and that all other provisions of this Agreed Order have been complied with. With respect to the Interim Action, Ecology will provide written confirmation of construction completion, signalling the initiation of the operation & maintenance/monitoring phase of Interim Action. Completion of the RI/FS portion of this Order will coincide with Ecology's acceptance of the Final FS Report. Ecology's acceptance of the Final FS Report will be confirmed in writing within forty five (45) days of receipt.

VII.

Enforcement

1. Pursuant to RCW 70.105D.050, this Order may be enforced as follows:
 - A. The Attorney General may bring an action to enforce this Order in a state or federal court.
 - B. The Attorney General may seek, by filing an action, if necessary, to recover amounts spent by Ecology for investigative and remedial actions and orders related to the Site.
 - C. In the event the PLPs refuse, without sufficient cause, to comply with any term of this Order, the PLPs will be liable for:
 - (1) up to three times the amount of any costs incurred by the state of Washington as a result of its refusal to comply; and
 - (2) civil penalties of up to \$25,000 per day for each day it refuses to comply.
 - D. This Order is not appealable to the Washington Pollution Control Hearings Board. This Order may be reviewed only as provided under Section 6 of Chapter 70.105D RCW.
2. Each PLP named in this Agreed Order is individually responsible for compliance with the terms and conditions of this Order. Compliance with this Agreed Order by any PLP is not conditioned on the performance of any other PLP or group of PLPs. Similarly, the right of Ecology to enforce this Order against any PLP is not conditioned on the performance of or enforcement against any PLP or group of PLPs.

Effective date of this Order: 1/5/95

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

BY

John J. Giddings

Position

Section Manager

Date

1/5/95

NORTHWEST ALLOYS, INC.

EDWARD L. SANDMAN, JR.

By Edward L. Sandman, Jr.
Position PRESIDENT
Date 11/15/94

L-BAR, PRODUCTS, INC.

By Frank C. Melby
Position President
Date November 15, 1994

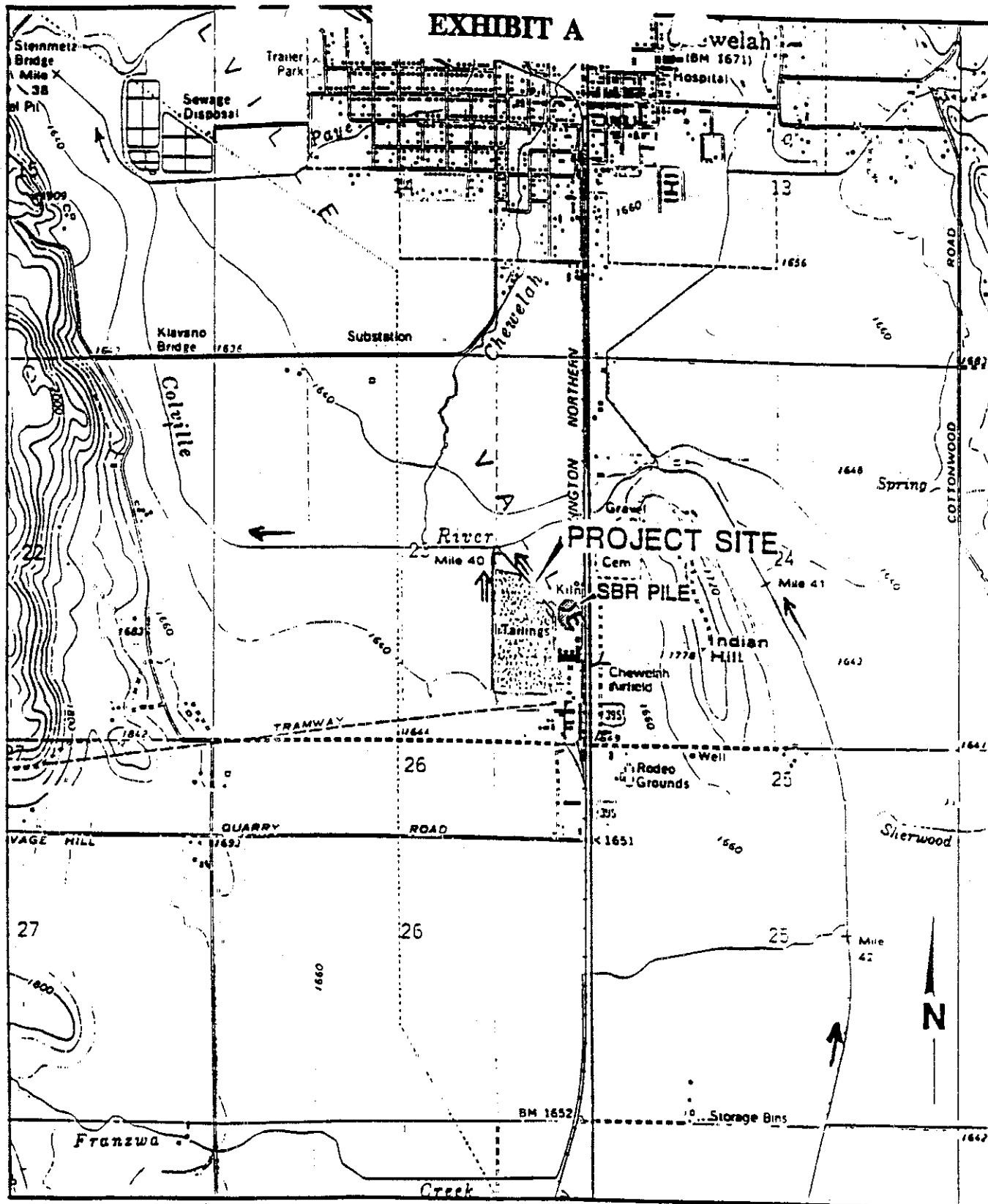
(Subject to Bankruptcy Court Approval)

RESERVE INDUSTRIES CORPORATION

By _____
Position _____
Date _____

Drawn Date 3-16-99 Checked By JCL Field Rep. JCL

EXHIBIT A



1990 D. Lehn

0 2000 4000
SCALE: 1" = 2000'

Base map USGS "Chewelah, Wash." quadrangle,
7.5 min. series, 1964 P.R. 1986, and "Valley, Wash."
1965 P.R. 1986.

L-BAR PRODUCTS, INC.
Chewelah, Wash.

VICINITY MAP

MAR 1990

E-1126-01

GCI GIFFORD CONSULTANTS, INC.
1. 10000 UNIVERSITY DR. SUITE 100, WA 99151

← RIVER FLOW DIRECTION

⇐ DISCHARGE DITCH

EXHIBIT B

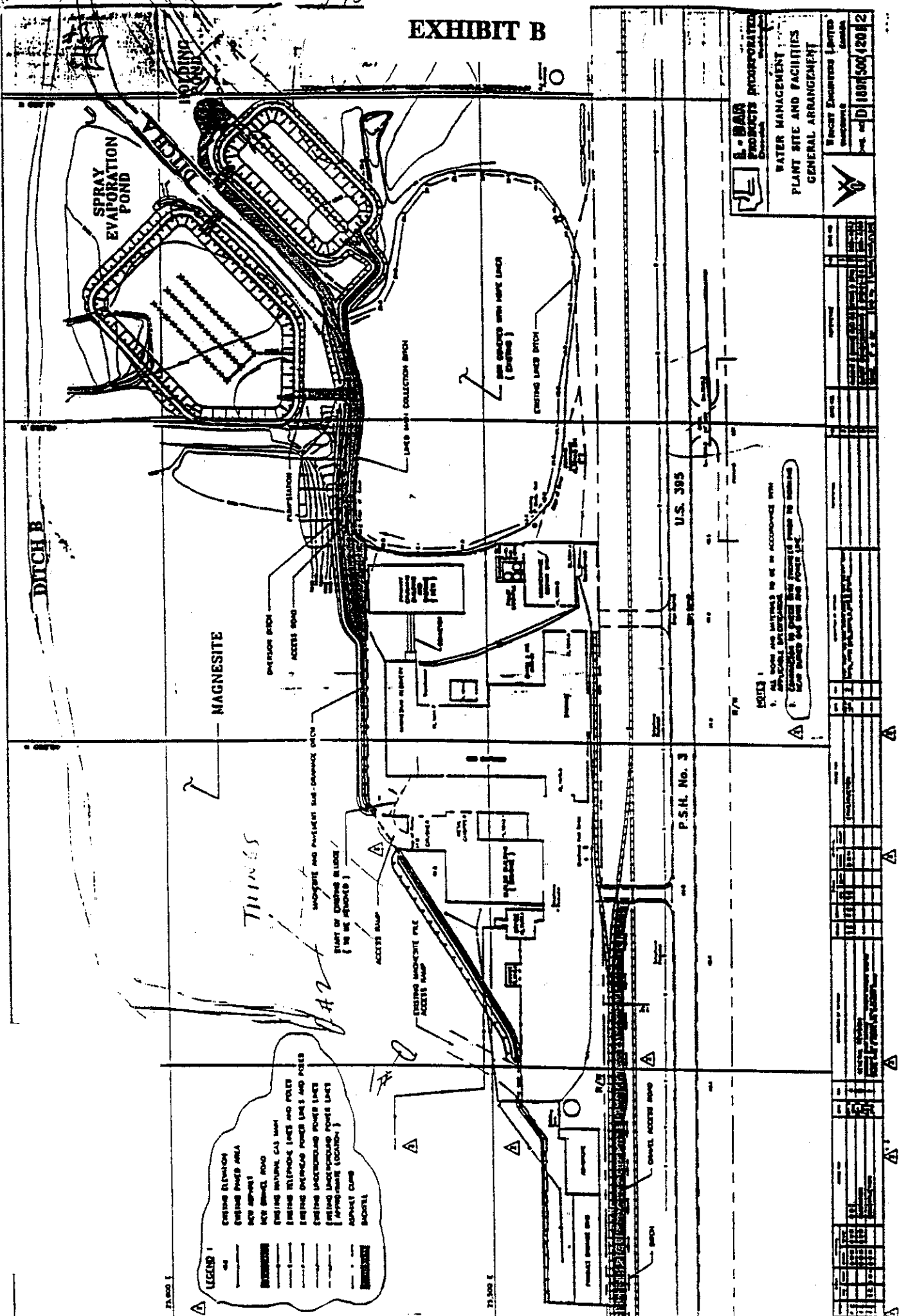


EXHIBIT C

SCOPE OF WORK

INTERIM ACTION

This Scope of Work is to be used by the PLPs or their contractors to develop Work Plans for an Interim Action which will intercept, abate, manage, and treat water from the site and potentially discharge water into the Colville River. The Interim Action will also include the characterization and potential removal or processing of on-site materials. This Scope of Work will be included as an enforceable attachment to the Agreed Order.

The Interim Action Work Plan shall be prepared and interim action will be conducted in accordance with the Model Toxics Control Act and WAC 173-340-430. Permit or permit modifications for water discharges into the Colville River will be done in conjunction with the requirements of Emergency Enforcement Order No. DE 94TC-E102 issued March 17, 1994. The schedule for tasks required by the permit under the Emergency Order will override any schedule proposed for the same tasks under the interim action.

TASK I. INTERIM ACTION WORK PLAN

This work plan shall include the following:

1. Treatment alternatives for site surface water(s). All alternatives must meet the discharge limits specified in the permit or permit modifications for water discharges into the Colville River and other applicable state and federal laws for discharge.
 - a. Evaluation of the design, construction, and feasibility of implementing the partially completed water management system as a potential means of treating surface waters and/or extracted ground water. This should include the holding pond/evaporation pond system and the ground water extraction gallery system.

- b. Identification of other applicable alternatives and technologies for surface water treatment in combination with or in lieu of the partially completed water management system.
 - c. Analysis/evaluation of alternatives.
 - 2. Pilot study of ground water extraction within the barrier wall system.
 - a. Design plan for field pilot scale extraction, storage and disposal, as appropriate, of contaminated ground water.
 - b. Management/treatment of water generated from pilot studies.
 - c. Design of bench scale study treatability evaluation for extracted ground water in conjunction with evaluation of alternatives for surface water treatment (Item 1b above).
 - 3. Proposed Surface Water Treatment System Alternative.
 - a. Explanation as to why the proposed alternative was selected.
 - b. Methods for management or disposal of any treatment residual and other waste materials generated as a result of the interim action.
 - c. Applications and approvals for necessary permits.
 - i. NPDES permit
 - ii. Other permits.
 - 4. Characterization and/or management of on-site materials.
 - a. Inventory of all materials stored and/or stockpiled on site including materials on top of the magnesite pile.
 - b. Plan for characterization of materials as necessary for management.
 - c. Rationale for recommendations regarding management of characterized materials.

DELIVERABLES: INTERIM ACTION WORK PLAN - DRAFT
INTERIM ACTION WORK PLAN - FINAL

TASK II. SEPA CHECKLIST

The SEPA checklist shall include the information needed to fulfill the applicable requirement of the State Environmental Policy Act.

DELIVERABLE: SEPA CHECKLIST

TASK III. CONSTRUCTION PLANS AND ENGINEERING SPECIFICATIONS

These plans and specifications shall include the following:

1. Required permits and approvals.
 - a. NPDES Permit
 - b. Other permits.
2. Construction plans and specifications.
3. Schedule of implementation.

DELIVERABLES: CONSTRUCTION PLANS AND SPECIFICATIONS - DRAFT
CONSTRUCTION PLANS AND SPECIFICATIONS - FINAL

TASK IV. MATERIALS MANAGEMENT PLAN(S)

Management of on-site materials may include processing site materials either on or off site and transporting site materials for recycling/reuse (e.g., processing SBR as fertilizer) in accordance with state regulations and any required permits. Management plans for the materials may be submitted on a product by product basis. The plan(s) shall include the following:

1. Description of management of on-site materials.
2. Required permits and approvals.
3. Construction Plan and Specifications, as appropriate.
4. Schedule of Implementation.

DELIVERABLES: MATERIALS MANAGEMENT PLAN(S) - DRAFT
MATERIALS MANAGEMENT PLAN(S) - FINAL

TASK V. OTHER REQUIRED WORK PLANS

The other required work plans include the following:

1. Health and Safety Plan.
2. Compliance and Monitoring Plan.
3. Operations and Maintenance Plan.

DELIVERABLES: HEALTH AND SAFETY PLAN - DRAFT
HEALTH AND SAFETY PLAN - FINAL

COMPLIANCE AND MONITORING PLAN - DRAFT
COMPLIANCE AND MONITORING PLAN - FINAL

OPERATIONS AND MAINTENANCE PLAN - DRAFT
OPERATIONS AND MAINTENANCE PLAN - FINAL

TASK VI. IMPLEMENTATION/CONSTRUCTION

This task shall include implementation of all activities defined under Tasks I, III, and IV. An Interim Action Report shall be prepared after completion of construction and start up.

DELIVERABLES: INTERIM ACTION REPORT - DRAFT
INTERIM ACTION REPORT - FINAL

SCHEDULE OF DELIVERABLE ITEMS

INTERIM ACTION

<u>DELIVERABLE</u>	<u>DATE DUE</u>
Effective Date of Order	Start
Interim Action status report	Bimonthly
Interim Action Plan (Draft) SEPA Checklist (Draft)	30 days after start
Interim Action Plan (Final) SEPA Checklist (Final)	30 days after receipt of Ecology's comments on draft
Construction Plans and Specifications (Draft) Health and Safety Plan (Draft) Compliance and Monitoring Plan (Draft) Operations and Maintenance Plan (Draft)	As specified in Final Interim Action Plan
Construction Plans and Specifications (Final) Health and Safety Plan (Final) Compliance and Monitoring Plan (Final) Operations and Maintenance Plan (Final)	As specified in Final Interim Action Plan
Materials Management Plan(s) (Draft) Materials Management Plan(s) (Final)	As needed As agreed with Ecology

Implementation of Interim Action

As specified in Final
Interim Action Plan

Interim Action Report (Draft)

90 days after
completion of
construction and
start up

Interim Action Report (Final)

30 days after
receipt of Ecology's
comments